

## **Vine Mealybug Winery Best Management Practices**

### **June 2004**

VMB Best Management Practices (BMPs) are common sense practices that will reduce the risks of inadvertent spread of VMB to other blocks and vineyards. The effectiveness of some of these practices has not been validated with research data; however they balance cost with practical considerations for winery and vineyard operations.

#### **Field Sampling – All Vineyards**

All winery personnel that enter vineyards during the year should have training on VMB identification. Because infestations often go unnoticed for one or more years, **Minimal Sanitation Measures** should be taken prior to leaving one vineyard and entering another:

- Wash hands with soap and water
- Wipe clean or wash all sampling equipment that was taken into the vineyard

#### **Field Sampling – Infested Vineyards**

If a vineyard is infested with VMB, then more stringent sanitation steps are required.

- 1) An infested vineyard should be the last one visited in a day if possible.
- 2) If the infestation is believed to be limited to one block or area within the vineyard, enter that block/area last. However take Minimal Sanitation Measures (see above) after leaving and before entering other blocks or areas within the same vineyard. It is likely that a low incidence of infested vines have not been identified in other blocks/areas of that vineyard.
- 3) **Active Sanitation Measures** should be taken while inside an infested vineyard.
  - Disposable coveralls or sleeve covers are worn. These will be removed and placed in a bag for disposal as garbage that will be sent to a landfill.
  - If protective clothing is not worn, then the employee should wash hands and arms with soap and water prior to leaving the vineyard.
  - Shirt and pants should be brushed off and shoes should be brushed or washed to remove fruit or leaf debris.

#### **Harvest Protocols**

The winery will communicate its VMB harvest and winery waste management protocols to employees and to growers prior to harvest.

- 1) Growers that will be delivering grapes from a VMB infested vineyard will be scheduled to limit time in line and possible cross contamination of other trucks and equipment such as bins.
- 2) Winery waste from the destemming and pressing operations will be transferred among winery and grower-owned equipment (trucks, bins) so that VMB will not be spread to growers' or wineries' vineyards.
- 3) Growers may be asked to collect winery waste from infested loads for return to their vineyard or to a landfill.

### **Winery Waste Management**

Cluster stems from destemming operations and unfermented pomace from cluster pressing operations may contain live VMB. Fermented pomace that has not been combined with either stems or unfermented pomace will not contain live VMB.

- 1) No winery waste should be spread directly in vineyards because VMB may have been present in a vineyard, but not detected prior to harvest.
- 2) Winery waste placed in piles for storage and not managed (that is, the piles are not turned and not wetted as in a composting operation), should be covered in clear plastic immediately after harvest to solarize the mass and reduce VMB numbers. When temperatures warm the following spring, the plastic should be removed and the piles actively managed to complete the composting process to the best of ability.
- 3) Winery waste piles – managed and unmanaged - should be placed at least 50 feet away from vines. In addition, piles should be placed so that leachate from the piles will not contaminate surface and ground waters.
- 4) It is not known at this time how long VMB eggs can survive in winery waste that has been placed in piles and either managed or not managed.

These BMPs are common-sense guidelines that were developed based upon what we know about VMB today. They must be adapted to fit your winery operations. The goal is to limit the inadvertent spread of VMB in Sonoma County, which is in the best interests of all growers and wineries.